



CH2M HILL
2020 SW 4th Avenue
Suite 300
Portland, OR
97201-4958
Tel 503.736.4387
Fax 503.736.2026

December 13, 2012

Mr. Steven R. Schell
Attorney
Black Helterline LLP
805 Southwest Broadway
Suite 1900
Portland, Oregon 97205-3359

Subject: Northwest Pipe Company, Burgard facility, Portland, Oregon

Dear Mr. Schell:

In our discussion today you requested a letter briefly summarizing my opinion about areas of contamination identified in 1989 by consultant Dames & Moore and remediation contractor Crosby & Overton at the Northwest Pipe facility located at 12005 North Burgard Road, Portland Oregon (NWP10587-NWP10589; NWP10719-NWP10732; NWP0003896-NWP0003909; NWP0003916-NWP0003917; and NWP0003921-NWP0003928).

As we discussed, in 1989 Dames & Moore investigated the site and Crosby & Overton completed soil removal at several locations where the presence of contaminants, including polynuclear aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and polychlorinated biphenyls (PCBs) were identified.

I have worked with investigating and remediating active and closed industrial sites in a wide range of settings for over 29 years. In my opinion, the types of contamination identified in these 1989 documents very likely represented, at least in part if not in the majority, historical contamination residuals related to past materials handling and waste management practices that were commonplace prior to the modern era of waste management practices. This era was initiated by several important environmental statutes; namely:

- Toxic Substances Controls Act, 1976 (phased out and placed severe restrictions on liquid PCB use after 1978)
- Resource Conservation and Recovery Act, 1976 (instituted cradle to grave solid and hazardous waste management requirements)
- Comprehensive Environmental Response, Compensation, and Liability Act, 1980 (launched the Superfund era, where the financial obligations associated with improper waste management became evident)

It is logical to conclude that, prior to these statutes and subsequent inspections and enforcement, materials handling and waste management practices at industrial sites would have been more prone to causing soil and/or groundwater contamination than would modern-day practices. Conversely, improvements in these practices required to comply with such statutes and supporting regulations would lead, in the years following their implementation, to a reduced potential for releases to the environment; as intended by Congress in passing the statutes.

Consequently, in my opinion it is reasonable to conclude that at least some of the hazardous substances and petroleum products identified by investigations at the Northwest Pipe property are lingering remnants of practices that were commonplace prior to Northwest Pipe's acquisition of the property in 1982.

Please call me at 503-736-4387 if you have any questions or if this letter does not meet your needs.

Sincerely,

CH2M HILL

A handwritten signature in black ink that reads "Ken Shump". The signature is written in a cursive, slightly slanted style.

Ken Shump, R.G.
Principal Hydrogeologist